

# PATENT ABSTRACTS OF JAPAN

(11)Publication number : 56-048077

(43)Date of publication of application : 01.05.1981

(51)Int.Cl. H01M 12/06

(21)Application number : 54-122767 (71)Applicant : SHIN KOBE ELECTRIC MACH CO

LTD

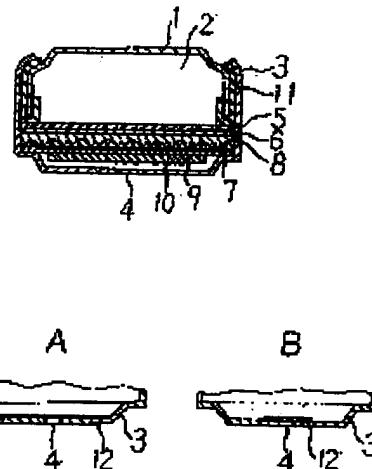
(22)Date of filing : 25.09.1979 (72)Inventor : FUJITA MASARU  
MAKI YOSHIYUKI

## (54) ZINC-AIR BATTERY

### (57)Abstract:

**PURPOSE:** To provide long life of a battery as well as to prevent creeping phenomena by enclosing an air hole made on the battery vessel of a zinc-air battery with use of a water-repellent membrane.

**CONSTITUTION:** Zinc powder 2 is filled into a cap 1 which is partly used as a cathode terminal. An air electrode 8 in which catalysts such as platinum black are added into carbon powder is inserted through an electrolytic impregnant 5, a separator 6 into a core material 7 made of nickel or stainless steel net or the like at the inner bottom part of a vessel 3 in which an air hole 4 to lead to the outside at the bottom part. Besides, a liquid absorbent 10 to absorb water-repellent fluororesin membrane 9 and creeping electrolyte is provided in the vessel 3, and this vessel 3 is enclosed through a packing 11 by the cap 1 to form a flat-shaped zinc-air battery. In this case, the air hole 4 of the vessel 3 is enclosed by being bonded or welded with use of air-preamble and water-repellent high molecular material, for example a thin fluororesin membrane 12.



### LEGAL STATUS